This product complies with the RoHS Directive (EU 2002/95/EC).

PNZ334 (PN334)

Silicon planar type

For optical control systems

■ Features

- Plastic type package (ϕ5)
- High coupling capabillity suitable for plastic fiber
- High quantum efficiency
- High-speed response

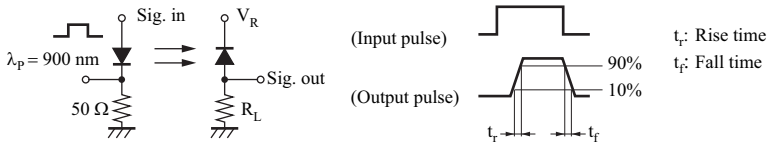
■ Absolute Maximum Ratings T_a = 25°C

Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	30	V
Power dissipation	P_D	100	mW
Operating ambient temperature	T_{opr}	–25 to +85	°C
Storage temperature	T_{stg}	–30 to +100	°C

■ Electrical-Optical Characteristics T_a = 25°C±3°C

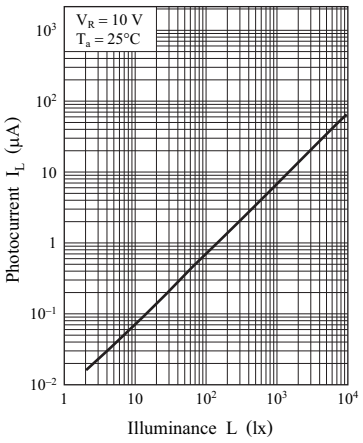
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Photocurrent *1	I_L	V_R = 10 V, L = 1 000 lx	5.0	7.0		μA
Drain current	I_D	V_R = 10 V		0.1	10	nA
Terminal capacitance	C_t	V_R = 0 V, f = 1 MHz		6		pF
Peak sensitivity wavelength	λ_{PD}	V_R = 10 V		850		nm
Half-power angle	θ	The angle when the photocurrent is halved		70		°
Rise time *2	t_r	V_R = 10 V, R_L = 50 Ω		2		ns
Fall time *2	t_f			2		ns

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.
2. Spectral sensitivity characteristics: Sensitivity for wave length over 400 nm maximum sensitivity ratio is 100%.
3. This device is designed by disregarding radiation.
4. *1:Source: Tungsten lamp (color temperature 2 856K)
*2: Switching time measurement circuit

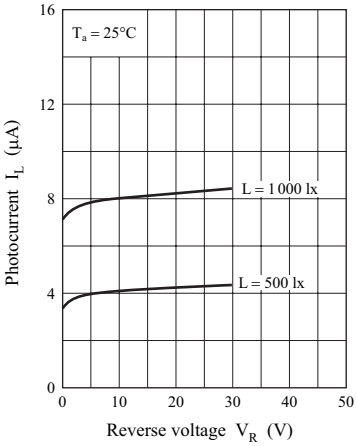


Note) The part number in the parenthesis shows conventional part number.

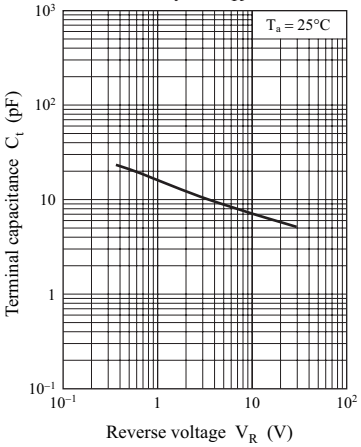
I_L — L



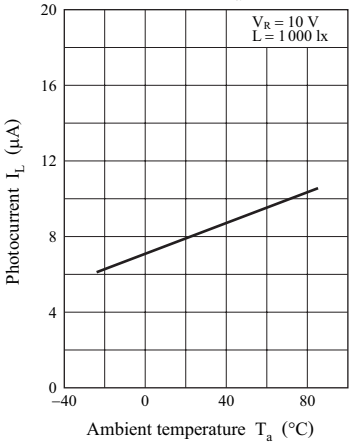
I_L — V_R



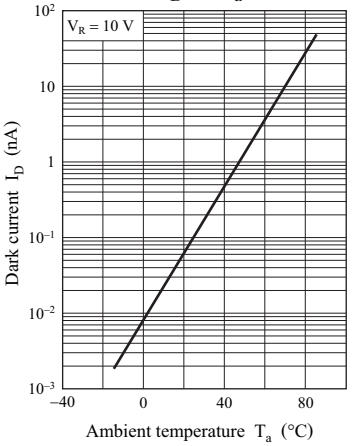
C_t — V_R



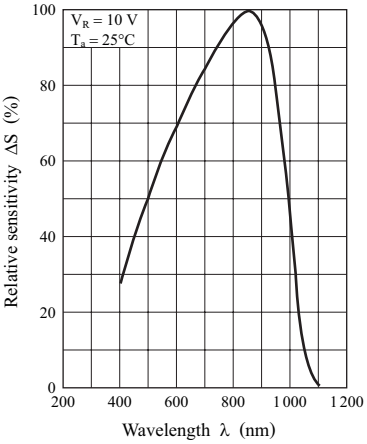
I_L — T_a



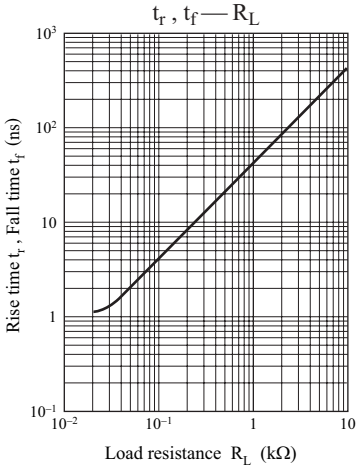
I_D — T_a



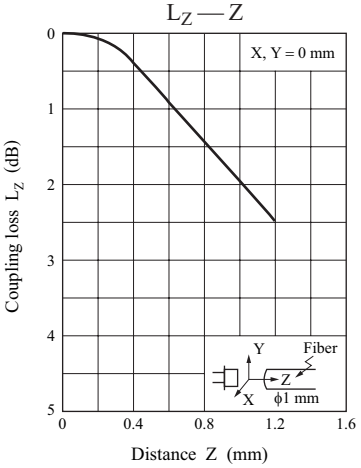
ΔS — λ



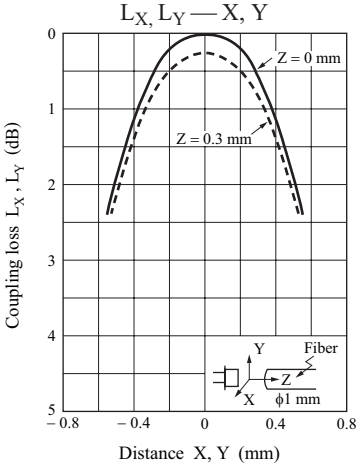
t_r , t_f — R_L



L_Z — Z

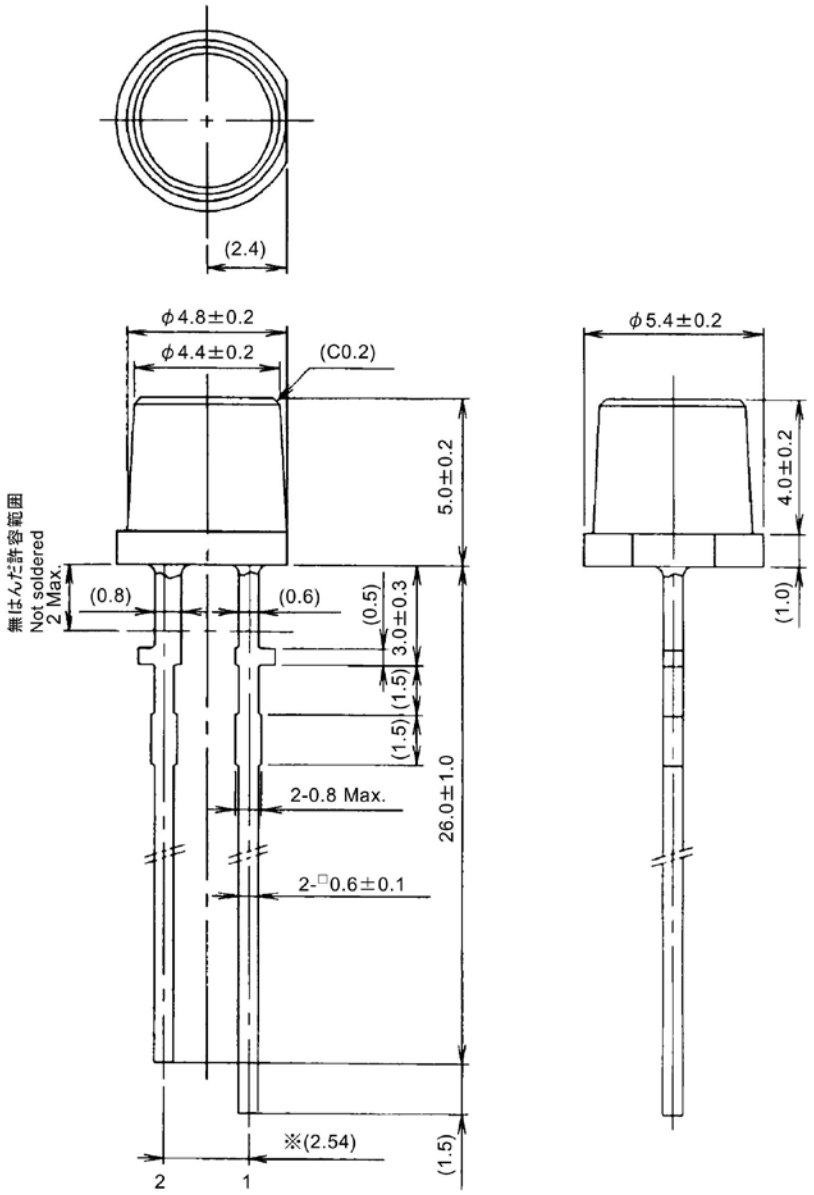


L_X, L_Y — X, Y



■ Package (Unit: mm)

LPTFTN2S0001



- Pin name
  1: Anode
  2: Cathode

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